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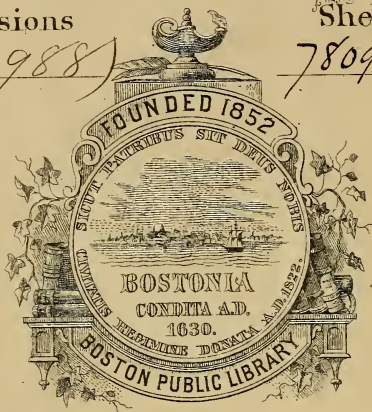
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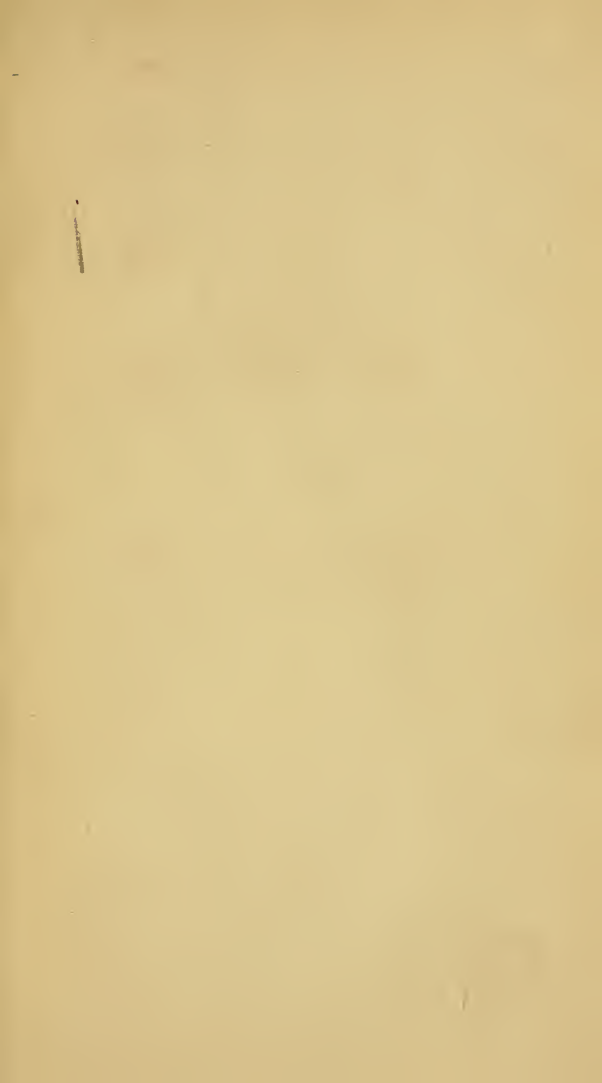
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A GUIDE
TO THE USE OF
THE BUXTON WATERS.

BY
WILLIAM HENRY ROBERTSON, M.D.,
PHYSICIAN TO THE BUXTON BATH CHARITY.

FOURTH EDITION, REVISED.

LONDON :
JOHN CHURCHILL, PRINCES STREET, SOHO ;
AND W. MOORE, BUXTON.

MDCCCXLVII.

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PREFACE.

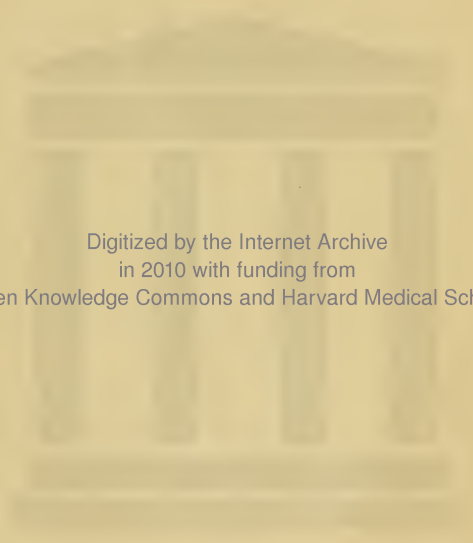
I HAVE often felt that it might be desirable to give the public a very cheap work on the Buxton Waters,—so cheap as to be within the reach of every class of people resorting to Buxton,—and giving, as simply as possible, an account of the mode of using the baths and the waters, with the necessary cautions against using them improperly. I should probably have done this long ago, had I not felt myself withheld by considerations which no longer exist; and I can only trust that the publication, founded as it is on much observation, will be found useful.

This little pamphlet cannot be supposed as being meant to supersede the larger and fuller account which I have published of “Buxton and its Waters.”

Some few additional observations will be found in this edition, and the work has been again carefully revised.

THE SQUARE, BUXTON.

June 7th, 1847.



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A GUIDE

TO THE USE OF

THE BUXTON WATERS.

BUXTON—so long celebrated for its tepid waters—is situated at the western side of the north part of the county of Derby, and on the margin of an extensive mountain limestone formation.

There can be little doubt that the tepid springs of Buxton were known to the Romans ; and it is probable that a warm water, of sufficiently elevated temperature to be remarkable by its steam and heat alone, and tempting the people to bathe in it by this circumstance, would be used, from the earliest ages, as a luxurious bath, and thence have any medicinal properties it might possess, gradually, but probably not very slowly, brought into some notice. However this may have been, history tells us very little of Buxton until the age of Queen Elizabeth, farther than the discovery of a very old bath, of seemingly Roman construction, leads us to imply. But history does tell us, that, at that sufficiently remote time, Buxton was much celebrated as a bathing-place ; that it was visited by Mary Queen of Scots on several occasions, and frequented by some of the highest

and mightiest of Elizabeth's court for the cure of their ailments.*

The formation of mountain limestone, on the margin of which Buxton is situated, is of very considerable extent ; and it contributes much, by its elevation and physical characters, to the salubrity and general features of the climate of the place. The lower part of the town is 1029

* There is, in the Chapel of the Rolls, the original record of "a grant to Thomas Dakyn and the Inhabitants of the Chapelry of Fairfield," dated the 37th of Queen Elizabeth, which illustrates curiously the state of Buxton at that time, and contrasts very much with what obtains at present. Fairfield is a pretty village and Chapelry adjoining to Buxton ; and in these days, it is in some large degree indebted to its neighbourhood for the enhanced value of the land, and the readier sale of its agricultural produce ; and the village itself is advantaged by affording lodgings to some of the visitors of Buxton. In those days, however, the inhabitants humbly supplicated the Queen for a grant, to support a "minister or chaplain,"—pleading in the supplication, among other weighty reasons justifying the Royal bounty, that, "Whereas, the aforesaid Inhabitants now fallen into extreme poverty, as well by reason of the expenses aforesaid, as by reason of the frequent access of divers poor, sick, and impotent persons repairing to the Fountain of Buxton, in the county aforesaid, within the neighbourhood of the Chapel aforesaid, for whose maintenance and relief the Inhabitants aforesaid are daily charitably moved to apply their own goods, by which the aforesaid inhabitants of the Chapelry aforesaid are not only rendered unable to sustain and maintain the Minister or Chaplain aforesaid, but also, by reason of their poverty, the aforesaid Chapel has fallen into great ruin and decay, and thus the Inhabitants aforesaid will be altogether deprived of all Divine Service and Spiritual Instruction, unless a speedy remedy, in this behalf, shall be provided by us. Wherefore they have humbly supplicated us, that we (being piously inclined) should be pleased to found and establish, within the Town of Fairfield aforesaid, one perpetual Chapel, for our minister or chaplain, to celebrate divine service there, for all the Inhabitants, within the Chapelry of Fairfield aforesaid, for ever to remain." This furnishes a very gratifying and conclusive instance of the steady and great advances the Buxton Waters have made in public estimation, from that time to the present. I am indebted for this interesting reference to the kindness of Mr. Goodwin, of Pictor.

feet above the level of the sea ; and this considerable elevation, together with the well-known and characteristically absorbent nature of the mountain limestone, renders the air necessarily light and dry—remarkably free from fogs and exhalations—and bracing and healthful in a proportionate degree.

For the information of the distant inquirer, it may be well to mention here, that the principal building of Buxton—called, from its form, the Crescent—is chiefly devoted to two large hotels, called respectively the Great Hotel, and St. Ann's Hotel ; and that, besides these, there is one of the oldest buildings—the Hall—which forms a third large hotel ; and farther, that the Grove, the George, the Shakspeare, the Eagle, the Angel, the King's Head, the Cheshire Cheese, the Sun, and several others, are well supported and well conducted establishments ; and that, with few exceptions, some part of every house is devoted to the reception of lodgers ; and that upwards of two thousand visitors are commonly accommodated in the town at the same time, when the place is said to be full.*

The temperature of the warm springs of Buxton is 82 degrees. The water makes its final way to the surface through several openings, and was computed by Dr.

* Buxton is situated in a remarkable district. The rich and romantic beauties of Cow Dale, Chee Dale, Millar's Dale, Monsal Dale, and Middleton Dale ; of Dove Dale, and the Dale of Ghoit—the cavern wonders and wild scenery of Castleton—the pretty town of Bakewell—the rocky grandeurs and wonderful beauties of Matlock—Chatsworth, the princely seat of the Duke of Devonshire—Haddon Hall, the glorious old residence of the Vernons—Hartington and Beresford, famous for the sports and memory of old Izaak Walton—Lyme Hall, the seat of the distinguished family of Legh, during, it would seem, at least fifteen generations—are all within easy reach of Buxton. Buxton is 159 miles from London, 24 miles from Manchester, 26 miles from Sheffield, 38 miles from Derby, 12 miles from Macclesfield, and 12 miles from Leek.

Pearson, with probably perfect fairness, to be discharged in the large quantity of more than one hundred gallons per minute. The gaseous contents of the water are carbonic acid and nitrogen, in the proportion of a cubic inch and a half of the former, and four cubic inches and a half of the latter, in the gallon of water. Of solid contents, its analysis gives only fifteen grains in a gallon of water ; and these consist of the muriates of magnesia and soda, and the carbonate and sulphate of lime. The chemical analysis of this water could not have led to any *à priori* inference as to its effect on the human system, whether in health or disease. We know that nitrogen is contained in this water in a free state ; and we know that it is, and must be, an important agent ; but we can hardly ascribe the immensely stimulating power of this water, whether it be drunk, or used as a bath, to this gas ; and are forced to admit, that its virtues depend on some hitherto undetected constituent, whether strictly chemical or not remaining likewise a mystery. It has been repeatedly inferred to contain Iodine, and the therapeutic effects would support such an inference ; but the opinion is purely conjectural.

The water is singularly clear and brilliant, and perfectly free from colour. It is vapid and somewhat calcareous to the taste. It is what is called *soft* to the touch, and is admirably adapted for infusing tea, boiling vegetables, and the uses of the laundress. Its temperature, remarkable buoyancy, softness and clearness, and freedom from smell, or marked taste, render it a most agreeable bath, giving, at the instant of immersion, the slightest possible shock, instantly followed by a perfect and general glow, which usually continues the whole time the person is in the bath, and indeed generally lasts for several hours afterwards.

There are five baths, called in the place *natural baths*,

to distinguish them from the baths where the same mineral water is used at any higher temperature which may be required. Some of these *natural baths* are of considerable size ; and all of them are sufficiently large for the purposes of exercise, &c. They are, of course, furnished with dressing-rooms, and every requisite comfort and attendance.

There appertains to every bath a double action force pump, with appropriate nozzles, by which a *douche*, or continuous stream of water, can be directed against any part of the surface of the body or the limbs, that requires the special or local use of the water.

The hot baths are supplied with the tepid water, to which is added any required quantity of the same water carefully heated, to make a bath of any temperature that may be wished for.

The drinking well is in a covered building ; and the water runs into it in a constant and sufficient stream from a covered channel, having lost, however, some little of its temperature, although most carefully conveyed through a covered gritstone conduit. It flows into the basin at the temperature of 77 degrees.

It need only be added to these preliminary observations, that, by the care and munificence of its noble proprietor, the Duke of Devonshire, the Buxton visitor has provided for, and thrown open to him, very extensive, well laid out, and carefully kept, walks and grounds ; that the roads are good, the scenery beautiful—alternate hill and dale, rock, moor, and enclosure—judiciously and liberally clothed and embellished by extensive plantations.

The Buxton season—which might properly be extended over the whole year, as far as the invalid is concerned, as the waters are quite unaffected in quantity and powers by season or weather—is said to begin in April or May, and to end in October or November. July, August, and

September are the months in which the gregarious and fashionable chiefly resort to it.

There is, besides the tepid water, an excellent mild chalybeate water, at the back of the Crescent.

It has been mentioned that Buxton is situated on the margin of the mountain limestone formation ; to an adjoining bed of shale it is indebted for the chalybeate water mentioned above ; and immediately beyond the narrow bed of shale on one side of the place, and at no considerable distance on nearly two sides of the town, begins an extensive gritstone formation, forming the ridges of hills which more or less protect it from the northern and westerly winds. The summit of one of these ridges, that to the west, is, at the distance of three miles from the town, somewhere about a thousand feet higher than the elevation of Buxton ; and when the winds are easterly or southerly, the clouds, attracted by these hills, are often and evidently carried away from Buxton, to be emptied on the further districts ; and to this may be referred the fact, that although Buxton, like all hilly districts, is sufficiently subject to wet weather, it is by no means so much so as many districts having the same elevation, nor probably even so much so as some of the champaign country around it. It is to this gritstone formation, that Buxton is indebted for the pure and beautiful water, with which it is supplied for domestic and culinary purposes. This water is remarkably free from foreign or mineral impregnation, and is of course destitute of taste, smell, or colour. This deserves to be especially mentioned in every account of the Buxton waters, inasmuch as it obviates what is found to be a great inconvenience by strangers resorting to limestone districts in general, viz., the necessity of drinking the calcareous water, which is often found to disagree with those who are not accustomed to its use.

The tepid waters of Buxton, whether drunk or used as a bath, or made use of in both ways, are found to be especially useful in cases of rheumatism, gout, neuralgia, spinal irritation, and certain forms of derangement of the digestive, urinary, and uterine functions.

The effect of these waters on the system, whether in health or disease, is essentially stimulating. The stimulating effect is usually produced more immediately, and in a more marked degree, when the water is drunk, than when it is only used as a bath; but the effect is generally of much shorter duration. When the water is drunk by a person in perfect health, it frequently produces a slight sense of giddiness, followed by a sufficiently perceptible degree of increased warmth, and the usual marks of increased action that attend the use of any other stimulant. If, however, the water has not disagreed with the system, these indications will be found to pass away very speedily. If not thus rapidly got rid of, or the internal use of the water be continued under improper circumstances, the excitement increases, and irritation is set up—marked by thirst, loss of appetite, headache, quickened circulation, and other symptoms of feverishness and derangement. The effect of the bath on a healthy system is, that the momentary shock at the instant of immersion is followed promptly by reaction, with a decided general glow and increased vigour of mind and body, increase of appetite, and of general secretion and excretion. This is apt to be followed in the course of a few days, the use of the bath being continued every day, or even if used somewhat less frequently, by some degree of sluggishness of the organs; and, these indications being unheeded, by feverishness and general derangement. It need hardly be said, that no such effects would succeed the drinking of repeated tumblers of warm water at the temperature of 82 degrees,

nor would such be induced by bathing repeatedly in warm water of this temperature ; and this would be sufficient to show, that the tepid waters of Buxton have specific and remarkable effects upon the human system, and be *à priori* evidence that they may be influential in certain cases of disease.

The fact that these waters are so essentially and largely stimulating, renders especial care necessary, that they be not made use of under improper circumstances, and that every means be taken to render the cases to which they are adapted, as fit as possible for their beneficial operation.

In regard to the first of these particulars, it should be known that cases of organic change, or structural alteration, in any of the great internal organs, whether of the brain, the heart, lungs, liver, or kidneys, would be, *primâ facie*, evidence enough, that these waters should not be made use of. And, it should be added, that in cases where disease is of congestive or inflammatory type, they should either not be used at all, or used most cautiously, until the congestion or inflammation has been subdued by appropriate means.

In regard to the second of these particulars : *i. e.* to adapt the system, as far as may be, to the use of these waters,—to fit it, as far as possible, to derive the fullest benefit from their use, it is of primary importance to secure a free and active condition of the great excreting organs. For this purpose, two or more doses of efficient aperient medicine are often usefully taken, before the course of these waters is commenced ; and, moreover, during the course of the waters, it is found, by most people, that an occasional aperient is quite necessary. The Compound Rhubarb Pill, or the Compound Extract of Colocynth, in pills of five grains each, of which one or two may be taken at bed-time, when required, often subserves this important purpose sufficiently well.

The primary effect of these waters, however used, is essentially stimulating. Their secondary effect is equally and essentially debilitating. After they have been used for a longer or shorter time, according to the nature of the case, and the strength of the individual, they begin to impair the powers of the system; and this is to be regarded as the best proof that the course has been persevered in for a sufficient length of time, to enable the waters to influence, as far as possible, the complaint under treatment. This debilitating effect, in most cases, ceases within a very short time of their being discontinued.

It is always well that the fatigue and hurry of a journey should be recovered from, before beginning to make use of these waters; and this interval, of one or more days, is generally well spent in taking one or more doses of some suitable aperient medicine. There is another reason why this little delay should be afforded, and why some cooling medicine should be taken in most cases. It is, that any change of air is apt to occasion some degree of derangement and irregularity of system, and that this is of course more likely to be the case, or to be so to a greater degree, when the change is to a thinner and lighter air, which must, of necessity, in itself, be more or less stimulating and exciting. Although the effect of bathing in these tepid waters is not so suddenly stimulating as when they are drunk, the fullest effects are only to be obtained by bathing in them; and the effect of the waters on the system is not only more decided when they are used as a bath than when used internally, but it is much more lasting.

The best times for using the bath are before breakfast, and about three or four hours after breakfast. Inasmuch as the bath is most efficient when used before breakfast, it is usual in all cases to commence its use about three hours after breakfast, and when two or

more baths have been taken, and they have been found to produce no unduly stimulating or deranging effects on the system, to begin to use them before breakfast. It should be said, and borne in mind, that many persons are, either constitutionally, or from long protracted ailment, of such feeble habit, or are of so excitable a system, as to render it inexpedient that they should ever bathe before breakfast.

The time during which a person should remain in the bath necessarily depends on the nature of the case, the powers of the constitution, and the excitability of the system. It is, however, almost always advisable, that little more than a momentary immersion should be allowed at the first ; and the time during which the individual remains in the water, may be increased one or two minutes every time, until it reach that sufficient time which is required by the case in its several relations. It may be stated, however, that there are few cases in which the bath may not be ultimately extended to four or five minutes, and as few cases in which an immersion of more than ten or twelve minutes will be found to be either necessary or expedient. In many cases it can signify very little whether the patient jumps into the bath, or descends into it more slowly down the bath steps. But those persons who are debilitated by disease, or are naturally feeble, the highly sensitive, or those in whom there may be any doubt as to the power, the elasticity, or the *hardiesse* of the system, should descend into the bath gently by the steps. In these cases, and perhaps in cases generally, it may be wise to wet the head with a few handfuls of water before immersing the trunk of the body ; or, where the hair is too long to allow of the head being wetted without some discomfort and risk of taking cold, it is expedient that an oiled silk bathing cap be worn, and that some of the water be poured over the

head thus covered. Whether the head be wetted or cooled in this way or not, it is right, with very few exceptions, that the head, whether with or without a bathing cap, be immersed at least once in the water, and, as soon as may be, after the person has got into the bath.

When the circumstances of the case permit it, some degree of walking exercise should always be taken before the bath is used. The degree of this can hardly be specified. It must vary necessarily with the powers of the system, and the nature of the case ; but it may be said, generally, that it should be sufficient to warm the individual thoroughly, without unduly heating the body, inducing sensible perspiration, or involving any sense of fatigue.

Exercise should not be taken immediately after the use of the bath. At least this is the general rule ; the exceptions being some cases in which the bath agrees in all other respects, but is followed by an insufficient degree of reaction, and a sense of chilliness and depression. In such cases exercise may be needfully taken immediately after the use of the bath ; but the degree of the exercise should be no more than is sufficient to secure the desirable amount of reaction. If exercise be not required immediately after the use of the bath, to secure a due reaction, or if it be taken to a greater degree than is needful to answer this intention, it adds to the risk of undue primary stimulation from the specific effects of the bath. Usually the bather should remain as much at rest in mind and body, for an hour after using the bath, as may be possible. During this time, or in cases of much debility for a longer period, the individual should confine himself to the lodging, and to the chair or the sofa. It is of much importance, that, during this time, the individual should not allow himself to go to sleep. The propensity to fall asleep after bathing is often very strong ; and the indulging it at that time almost always deranges

the nervous system, and occasions general excitement and irregularity, sometimes leading to headach, feverishness, indigestion, and derangement of bowels. This is a case of by no means rare occurrence, and of sufficiently easy prevention, by having recourse to an amusing book or easy conversation. It is as well, too, that a period of at least half an hour, and in most cases it is much better that an hour should elapse, between leaving the bath and taking any food.

Friction of the surface generally, and more especially of any affected part, should be used assiduously while the person is in the bath ; and a thorough rubbing after coming out of the water is extremely useful in securing and maintaining full reaction.

Sufficient notice has perhaps been taken of the period of the day when the bath should be used. It may however be added, that the later in the day, the more excitable the system always becomes, and the more apt the bath is to stimulate unduly. It is only the strong and less excitable who should venture to bathe late in the day ; and in their case, the beneficial effects would be more likely to be obtained by bathing before breakfast.

It is neither customary nor right to use the bath every day. There can be little doubt that the effects are, to a certain degree, cumulative—that, by bathing on several days successively, there is great risk incurred of a sudden manifestation of the stimulating effects of the waters on the system ; and in this way it often happens, that very serious injury results, and that cases are much aggravated. The risk is avoided, as far as may be, by using the bath either only every second or third day, or using it two successive days, omitting its use on the third day ; the frequency of its use being determined by the nature of the case and the powers of the system.

In many cases, especially in cases of rheumatism, of neuralgia, of relaxation of the spinal column, and of internal derangement, and, although much more rarely, in some gout cases, the douche forms a very valuable auxiliary to the bath. It is seldom, however, wise to make trial of the douche, until one or more baths have been taken, and the degree to which the system may prove to be susceptible to the influence of the bath has, in this way, in some degree been tested. The bather should keep himself as much immersed in the water during the operation of douching, as convenience, and the necessary elevation of the part, render practicable ; and it is found that the best time for douching is, when the person has been in the bath rather more than half the prescribed time, so as to enable him to exercise, and reproduce the full glow and reaction, after the somewhat chilling application of the continuous stream of water. It is well to regulate the degree to which the douche is used, by counting the number of double strokes of the pump ; and, in general, the patient should begin by having the moderate number of ten or twelve of these double strokes on any affected part to which the douche is ordered ; and this number should be increased afterwards, according to circumstances, by degrees, to forty, or fifty, or in rare cases to a hundred, or it may be two hundred strokes.

The number of baths which should constitute the course, varies necessarily very much in different cases. Of the three varieties of rheumatism, that which affects the periosteum requires a greater number of baths, other things being equal, than that which is seated in the ligaments of the joints ; and this, than that which is confined to the muscles. The number of baths required in neuralgic cases likewise varies very much, according to the part that is affected : the deeper seated the tissue affected, the greater the number of baths usually found to be

necessary. *Sciatica* illustrates this: it usually requires a full course of baths for its satisfactory relief. Generally speaking, gout cases neither require, nor will bear, so great a number of baths, as rheumatic cases are found to stand in need of; and, usually, the bath should not be used so frequently in cases of gout, as it may very properly be used in cases of rheumatism. Usually, the less recent the case, and the older the person, the greater the number of baths the course should consist of. It may be said, with the wish to give some idea of the probable number of baths to be required, that a course can seldom be followed by satisfactory or permanent effects, which consists of fewer than ten baths, and that more than twenty-five can seldom be taken advisably, without an interruption of some weeks. The average number of baths taken is probably fifteen or sixteen.

By so much as hot water is added to the natural water in the hot baths, are these less stimulating than the natural baths, and produce a less degree of specific effect. This circumstance makes them convenient and useful to a very considerable extent. There are many cases in which the natural bath is unduly stimulating, whether from the excitability of the constitution of the individual, or the nature of the case, or the condition, at the time, of the system, or of the part affected. And farther, there are many cases in which the natural bath, if used in the first instance, is found to be unduly stimulating, yet in which the warm bath is found to be borne sufficiently well; and, where the system has been gradually prepared by any requisite number of the warm and less stimulating baths, in which the natural baths are afterwards used without inconvenience, and advantageously. Hence these warmer baths enable many persons to use the waters, who would otherwise be unable to take advantage of them; and, in many cases, they

offer a suitable and excellent preparation for the use of the natural baths. It should be borne in mind, that the warmer these baths are taken, the less stimulating are they, and the less of the specific medicinal effects do they retain. It should not, however, be concluded from these observations, that it would be in all cases expedient that the use of the natural bath should be preceded by that of the warm baths. On the contrary, there are many cases in which the system is so far relaxed, that these baths are of doubtful utility, or it may be are positively injurious, and in which the natural baths alone are beneficial. Again, it must be borne in view, that, although these warm baths are by no means so stimulating in their effects as the natural baths, they are largely composed of the natural water, mixed with the heated water, and but little altered, and only so far diluted in its qualities; and that these baths are therefore by no means to be regarded as a medicinal agent of little power, but are, in fact, as many cases fully prove, sufficient of themselves for the cure of many cases of disease, in which, from circumstances, it is never deemed expedient to make use of the natural baths at all.

It is found to be unwise to use these baths at a higher temperature than 95 degrees, if the specific effects of the Buxton baths be expected or wished for. At a higher temperature than 95 degrees, the bath seems to lose its peculiar and specific properties, and to become little more influential than a bath of ordinary hot water.

It is customary, in cases where a preparation for the use of the natural bath by means of the warmer bath is indicated, that the first bath is taken at the temperature of 95 degrees, and that it is used at a lower temperature—say 93 degrees—the next time, then at 91 degrees, and then at 89 degrees, below which it is difficult to reduce its temperature, inasmuch as the water is, in the

first instance, at the temperature of 82 degrees, and as so very little warmed water is sufficient to raise the temperature seven degrees, the pipes and apparatus being all heated, and in such proximity to these baths.

The time during which persons remain in these warmer baths, is from three to fifteen or twenty minutes. The proper time for bathing is, as in the case of the natural baths, either before breakfast, or from two to four or five hours after breakfast. Exercise before using these baths is not so necessary as in the case of the natural baths, but it is desirable if circumstances enable it to be taken. The going immediately after bathing to the lodging, and remaining within doors and at rest at least an hour afterwards, is as necessary as after using the natural bath ; and during this period, any propensity to sleep should be as positively discouraged. It is perhaps not so necessary that the head should be immersed in these baths as in the natural bath ; but having the head or the bathing-cap wetted or cooled, by pouring over it half a pint or more of cooler water, is often desirable or necessary. There is attached to these baths a douche, with a long hose, by which a current of water is directed to any part (the current being derived from the water of the heated bath, and, of course, being of the same temperature), this being done whilst the part to be douched, as well as the rest of the body, is immersed in the bath. This is, therefore, a much milder form of douche than the douching at the natural baths, and answers a very useful purpose in many cases to which the stronger douche would not be adapted.

There is a shower bath attached to the hot bath ; but it is comparatively little used, for the obvious reason that the water runs too rapidly off the surface of the body to enable it to exert its specific effects to a satisfactory degree.

It is not by any means expedient to confine bathers to the room, after the hour or two has expired which should intervene between the bath and taking exercise. On the contrary, exercise can at no time of the day be taken more advantageously, than one or two hours after the bath ; and this is commonly the time devoted to drinking the waters, and taking the needful exercise after doing so.

The fact that the drinking of the tepid water produces a more immediately stimulating effect than is occasioned by the use of the natural bath, renders its internal use unfitted for many cases in which the baths are indicated. There are, for instance, comparatively few cases of gout in which it is desirable that these waters should be used internally ; and, on the other hand, there are many cases, as of irritability, relaxation, and it may be congestion of the mucous membranes, whether of the bronchiæ, or stomach, or bowels, or bladder, &c., to which the internal use of these waters is found to be eminently serviceable, and in which the use of the bath may be altogether contra-indicated, or be found, after trial, to be unsuited or injurious.

These waters usually stimulate the appetite and digestion, and act specially on the kidneys and bladder, increasing the quantity of the urine, and in cases of red or pink sediment, or of the urine passed being charged with mucus, influencing it speedily and decidedly in these particulars, supposing of course that they are merely dependent on functional causes. Occasionally, as it should appear when it meets with much free acid in the stomach and bowels, the water acts at first as a somewhat powerful purgative ; and this is sometimes the case to such a degree, as to render it necessary that the internal use of the water should be interrupted for some days ; and in some few cases it is

found, that, on account of this effect, the water cannot at any time be drunk, although apparently otherwise indicated. In general, however, this effect passes away entirely after the first two or three days, and does not return during the course ; and, on the contrary, is succeeded by a costive condition of bowels, rendering the frequent use of aperients necessary during the remainder of the course. In the large majority of cases in which the water is drunk, it never exerts this laxative power ; and indeed it much more usually happens, that, although acting decidedly as a diuretic, and otherwise evidently agreeing with the system, its use is attended with such an increase of costiveness, as to render aperient medicines more than usually necessary.

The proper times for drinking the water are, three or four hours after breakfast, and before breakfast. It is supplied to the drinkers in glasses of three different sizes, the smallest holding a quarter of a pint, the second size one-third of a pint, and the largest half-a-pint. It is usual to begin the course by taking one of the smallest glasses of the water three hours after breakfast ; to increase the quantity by taking one such glassful before breakfast, and a second glassful three hours after breakfast ; and if found to agree, to increase the dose by taking the second-sized glassful, and in the course of a couple of days more by taking the half-pint glassful. It is not, comparatively speaking, often desirable that more than a pint of these waters should be drunk every day. Yet there are, of course, cases, in which double, or even three times this quantity, is eventually found to be needful.

It is not a necessary inference, that, because the drinking of these waters may at first occasion a little giddiness, or sickness, or derangement of stomach, they are therefore not suitable to the case. Such effects often cease to be experienced, after they have been

taken two or three times. Yet these cases ought to be regarded watchfully, and perhaps with some suspicion ; and any possibility of cooling medicine being required ought to be properly considered. To lessen the chance of such unpleasant effects, it is always well that the first glass or two should be taken slowly, and even perhaps that the glass be held in the hand during some seconds before it is drunk,—and the smallest glass only should be taken until such effects cease to be experienced. Exercise, when the individual is not too much crippled to admit of it, should always be taken after drinking the water. The degree of it must of course depend on the powers of the individual, and other circumstances. This is one reason, and by no means the only one, why the water should never be drunk immediately after using the bath, inasmuch as it is not well that the system should be excited by exercise, nor needlessly exposed to the open air, immediately after using the bath ; whereas it is expedient that exercise should be taken after drinking the water, in order that it should be absorbed from the stomach, and dispersed through the system, as soon as possible,—which purposes exercise does unquestionably subserve. But the other reason why these waters should not be drunk immediately after using the bath, and it is even a more important reason, is, that, whether bathed in or drunk, these waters have essentially the same stimulating effect on the system ; and so far as the primary effect is concerned, it is so apt to be more than is desired, and is so little serviceable in the end, and this is so much less likely to be excessive when the baths are taken and the waters drunk at different times, that it is always wise to have an interval of an hour or more between the two ways of using these waters.

When it is desirable that the water should be drunk oftener than twice in the day, either because the

stomach is not able to digest it readily when taken in the larger quantities, or because more than a pint a day is required to meet the wants of the case, a third glass may be taken half an hour or an hour after the second glass ; and if need be, a fourth glass about two hours after luncheon, or about the same time after a light dinner.

Persons in health should not either bathe repeatedly in these waters, or drink them. Supposing the stomach and bowels to be in good order, or that care is taken by some fitting medicine to put them into good order in the first instance, and that there is no lurking ailment that would be a just and sufficient prohibition, there can be no reason why an occasional bath should not be taken, say one or even two baths a week,—for the purposes of cleanliness and comfort : but it may be confidently affirmed, that in no case is it right, or even prudent, that healthy persons should use these baths oftener ; and it may be added, that it might be unwise, under these circumstances, to remain in the water longer than three or four minutes. To prove how careful people ought to be about using the baths : in the year 1839, I was summoned home suddenly, and found a young lady, of some thirty years of age, extended on the sofa, senseless, and evidently labouring under pressure on the brain. The history I received from her distressed relatives, who were with her, was, that they were on a pleasure tour, passing through Buxton, and staying only a few days exploring the scenery of the mountain district ; that the young lady had been apparently in perfect health, that she had bathed for the first time that morning in the natural bath for amusement and curiosity, that she had immediately become comatose, and continued so ever since. There were the usual symptoms of such cases ; and there was evidence that there had been masked

disease of the heart, of probably long standing. The case terminated fatally, in defiance of all means, in the course of a few days. Her case is of much interest, inasmuch as the sufferer was young, and had appeared to herself, and to all about her, to be in perfect health, up to the time of bathing ;* but cases in which invalids use the baths under improper circumstances are of very common occurrence, and cases in which healthy people use them to their disadvantage, are by no means seldom met with ; and they point out, often and strongly, the importance of careful diagnosis and direction on the part of the medical attendant, and of caution on the part of the visitors of Buxton. It will be understood, that, under doubtful circumstances, the warm baths can be used much more prudently than the natural baths ; and that it is only in rare cases, and never when proper care is taken, that a single bath, or anything but a course of such baths, can be hurtful to the really healthy. As to the drinking of the waters, it may be said emphatically, that they should not be used except by those invalids whose cases require them.

The considerable elevation of Buxton and the surrounding district above the level of the sea, not only renders the atmosphere by so much specifically lighter and drier, and by so much stimulating and bracing to the system, but, added to the absorbent nature of the mountain limestone, renders the town and the district remarkably free from stagnant waters, and other sources of miasmatic impurity. Hence, cases of epidemic, endemic, and contagious diseases are comparatively little

* It may be inferred, that bathing, in any water whatever, would at the time have been equally fatal to this poor young lady ; and that the death is not ascribable to any peculiar effects of the natural bath. Such specific effects would not have been manifested until some hours after the bath, and perhaps not until after several baths had been taken.

known in Buxton. Even the ordinary exanthemata (measles, scarlatina, and the like), are comparatively rare, and usually of remarkably mild character ; and typhus, and even common continued fever, probably never obtains, unless brought into the district by persons who have been sojourning in less favoured places ; and when thus met with, has, in no single instance that I am aware of, been known to extend to a second case, or prove either contagious or infectious. In the fearful visitation of epidemic cholera, which afflicted these kingdoms some years ago, not a single case was met with in Buxton. When it is considered, that, according to the able and trustworthy reports of the Registrar General, nearly one-fifth of the total mortality of England is referred to the record of “ epidemic, endemic, and contagious diseases ;” a locality must be admitted to be singularly happy, in which people are so remarkably exempted from this extensively important class of diseases. If the mortality of this class of diseases is estimated at one in twenty of those attacked, the smaller amount of sickness, protracted indisposition, and resulting debility, that the inhabitants of this district suffer, in addition to the proportionally smaller rate of mortality, deserves some mention in a medical account of Buxton and its waters.

It is necessary to mention, that there are many cases in which the thin pure dry air of the mountain district must necessarily prove beneficial, to which the mineral waters of Buxton are in no way suitable. There are many who visit Buxton under these circumstances, who would be much benefited in this way, if they could be satisfied to make no use of the waters, who not only deprive themselves of the benefit, but do themselves harm, by tampering with these stimulating and powerful agents.

General debility, the consequence of febrile attacks, whether rheumatic or not ; local weakness of the spinal

column, the joints, or the mucous membranes and passages ; muscular, synovial, and periosteal rheumatism, if not in an acute stage ; gout, especially perhaps chronic gout, or the sequelæ of more active or acute gout, are all cases for the use of the Buxton baths. Dyspepsia in many of its forms, and especially when dependent on, or largely mixed up with, general feebleness and relaxation ; neuralgia, and more especially when partaking most of rheumatic character ; some cases of paralysis, especially such as may be ascribed to cold, or to spinal affections, or are of long standing, are all cases for a trial of the baths, or the waters internally, or both. Cases of general debility, consequent on the decline of life, or on having lived hard, and expended unwisely the nervous energies, either by intemperance or debauchery, or sedentary occupations and overworking of the mind, are those in which these waters often do much good, and in which they deserve to be tried. In cases of irregularity or relaxation of the female constitution, their effect is very often marked and rapid, and deserves to be better known than it has even of late years become. To this sufficiently long list must be added many of the milder forms of scrofula, to which indeed some of the above may be often referred, and which are often materially benefited by the use of these waters.

The diet, during the course of the waters, should be somewhat regulated, and in some degree restricted. But usually this ought not to be carried to such an extent as to interfere greatly with the individual's habits, or to weaken his system. It should be borne in mind, that after the first few baths have been taken, and the risk of undue stimulation, which has chiefly to be dreaded at the beginning of the course, has been avoided, the secondary effects of the waters should be looked forward to, and as far as may be

prepared for ; and, therefore, that although a little extra care in the diet, and perhaps even some diminution of the usual quantity, or some lowering of the usual quality of the food, may be necessary during the first week or ten days, that this may be very far from right or necessary afterwards, and even a more generous diet than the system may have been accustomed to, is sometimes required. The same observations apply to the use of stimulants. A man used to take three or four glasses of wine a day, might perhaps advisedly take a glass or even two glasses less during the first week of the course of the Buxton waters, but would seldom be justified in discontinuing the use of wine altogether ; and during the latter periods of the course should probably return to the maximum allowance per day, or even in some cases might do well to take more towards the end of the course, to bolster up the system, and enable it to sustain the debilitating effects of the waters.

To prevent, however, as far as may be, any crudity of stomach or bowels, is most important ; and with this view, it is well to avoid the use of cheese altogether during the course of these waters, and to eat little of either turnips, carrots, greens or cabbage, peas, new potatoes, stone-fruits, hot butter, or rich and greasy articles of food.

Regularity of hours is important at all times, and especially so during the course of the waters. Early hours of going to bed at night and of rising in the morning,—the latter being indeed quite necessary when either the bath is to be used, or the waters to be drunk, or when both have to be accomplished, at least half an hour before the breakfast,—and regular hours for the meals, are of much importance,—late hours of dinner being avoided as far as is consistent with the habits of the individual, and suppers being if possible abjured altogether.

Exercise in the open air, and especially walking exercise, should be carried as far as the strength and other circumstances will permit; and the spending a large part of every day in the open air, weather permitting, is justly to be regarded as important to almost every invalid, and as ministering largely to the chances of restoration to health and strength.

To leave the mind as far as possible free from the cares and anxieties of life, to give it as full and complete a holiday from its labours, and to be surrounded wherever it is possible by members of the family circle, are matters that are apt to be lost sight of, but which are really of primary importance, in enabling the system to realise all the good derivable from the use of these, or any other mineral waters.

The chalybeate spring is a mild but efficacious tonic, producing the general effects of iron upon the constitution. It is a very weak chalybeate, containing only about half a grain of iron in a gallon of water, held in solution by carbonic acid. It is much used by visitors. The usual dose is from a quarter to half a pint, taken once or twice a day. Like other tonics, this should not be taken before breakfast, but rather about three or four hours after breakfast, or three or four hours after luncheon or a light dinner. When the water is taken twice in the day, the interval between the doses need not be longer than from half an hour to an hour. It is right to take exercise after drinking the water.

This water is not only used internally; it proves to be a useful eye-water, and is accordingly much used for this purpose. It is likewise valuable as a local application in many cases of gouty and rheumatic swellings of indolent character, and appears to aid, when poured over the parts affected once or twice a day, in promoting the

absorption of articular deposits and ligamentous thickenings. The temperature of this water varies much; probably at least ranging from 46 to 54 degrees. Its specific gravity is stated as 1300.

It is not uncommon to drink the tepid water before breakfast, and the chalybeate between breakfast and dinner; occasionally the waters are mixed and immediately drunk, and in some cases with apparently good results. It is not uncommon to find that the mixed waters have an aperient effect. It need hardly be added, that the action of the chalybeate water, when it agrees, will be to promote appetite and digestion, without exciting thirst, pain at the stomach, headache, derangement of bowels, or feverishness. It strengthens the general system, and improves the action of the various organs of secretion. It has not, however, the specific and marked action on the kidneys and bladder that is exerted by the tepid water when taken internally.

It may be useful to conclude these observations on the waters of Buxton with some account of "The Buxton Bath Charity," which was established many years ago, to afford to the poor the gratuitous use of the baths, to supply them with needful medicines and proper medical advice, and, if standing in want of pecuniary assistance, to furnish them with a weekly allowance of money. A subscription of one guinea to this Charity, gives the right of recommending a person to its several advantages, supposing the case to be certified by the medical attendant to be one fitted for a trial of the Buxton waters; such certificate being annexed to the application for admission, and sent to the Secretary of the Institution before the patient leaves home, with a request to be informed when the person recommended can be admitted. The pecuniary allowance, when such is required, is six

shillings a week for the space of three weeks.* It was stated in the fuller account of these waters already published, that, of 14,906 patients admitted to the full benefit of the Charity, in the eighteen years preceding 1838, 12,608 were dismissed "cured or much relieved," the remainder having been either little relieved, or no better, at the time of dismissal. From that time to the beginning of September, 1846, 10,338 have been on the books of the Institution; and of these it may be gathered from the reports, that 7800 were cured or much relieved, 2334 persons having been dismissed only relieved in some degree, the small number of 486 having been dismissed as "no better." To appreciate fully this result, it should be understood that a large majority of these cases have been of some standing, and essentially chronic

* I have before me a printed document, bearing the date of 1785, which states, that the pecuniary fund for the relief of the poorer patients of the Buxton Bath Charity, originated in the year 1779; and it is added, that the Charity Baths had been devoted to the gratuitous use of the poor by "the beneficence of the noble Proprietor and his Ancestors." This shows that the Charity Baths must have been devoted to the poor from a much more remote time; and if this be considered as synonymous, as it well may, with the Buxton Bath Charity, the Institution may be regarded as being of considerable antiquity. It is curious and interesting to find, that, whereas at its origin as a pecuniary fund for the relief of the poorer bathers, the number receiving such relief was limited to "sixteen objects at one time", and it was only given during the six summer months, the number of persons who receive pecuniary relief at the present time is quite unlimited, and the period of the year is no longer restricted. An average number of 80 or 90 persons receive pecuniary relief weekly during the months of July, August, and September—the number thus effectually relieved being sometimes more than one hundred persons per week; the probability being, moreover, that as large a number of poor people have the use of the Charity Baths, with the other advantages, without the pecuniary assistance; or that from 150 to 200 individuals are, during those three months, constantly in the partial or the entire receipt of the benefits of the Institution.

in their character ; for which the ordinary appliances of medicine, whether by hospitals or dispensaries, or the efforts of the private practitioner, had been tried, and tried in vain ; and that usually in three weeks, and seldom in a longer period than four weeks, these most satisfactory results have been obtained. If it be added to these considerations, that the cases, for the most part cases of chronic rheumatism, are by no means in general of a kind that yields readily to remedial agents, but, on the contrary, are cases that, of curable diseases, are perhaps the most intractable and unyielding of all complaints,—the Buxton waters will have advanced for them the strongest proof that could be offered in favour of their effects on disease,—and the Buxton Bath Charity will need no further argument in its favour to be laid before the public. To this may be added the fact, shown by the Reports, that nearly the whole of the subscriptions received are literally returned to the patients in the pecuniary allowance ;—the expence of medicines, &c., being comparatively inconsiderable, and furnished to the Institution at a cheap and liberal rate,—the medical officers of course giving their services gratuitously,—and the Charity Baths, of which there are two (one for men and one for women), being devoted to the purposes of this charity by the liberality of the Duke of Devonshire.

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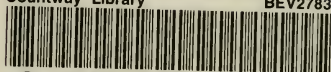
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